**SUPPLEMENTARY MATERIAL of**

**Brief Communication: "Reduction of the future Greenland ice sheet surface melt with the help of solar geoengineering"**

Xavier Fettweis¹, Stefan Hofer¹,², Roland Seférian³, Charles Amory¹,⁴, Alison Delhasse¹, Sébastien Doutreloup¹, Christoph Kittel¹, Charlotte Lang¹, Joris Van Bever¹,⁵, Florent Veillon¹, Peter Irvine⁶

¹SPHERES research units, Geography Department, University of Liège, Liège, Belgium
²Department of Geosciences, University of Oslo, Oslo, Norway
³CNRM, Université de Toulouse, Météo-France, CNRS, Toulouse, France
⁴Univ. Grenoble Alpes, CNRS, Institut des Géosciences de l’Environnement, Grenoble, France
⁵Earth System Science, Departement Geografie, Vrije Universiteit Brussel, Brussels, Belgium
⁶Earth Sciences, University College London, London, UK

*Correspondence to:* Xavier Fettweis (xavier.fettweis@uliege.be)
Fig S1: Annual SMB (in mmWE/yr) and summer 2m-temperature anomaly (in °C) of MAR forced by CNRM-ESM2-1 vs MAR forced by ERA5 over 1981-2100. The anomalies lower than the 1981-2010 interannual variability are hatched. All the anomalies are lower than 2 times the interannual variability and are then not statistically significant. The ice-sheet margins are represented by a blue line.